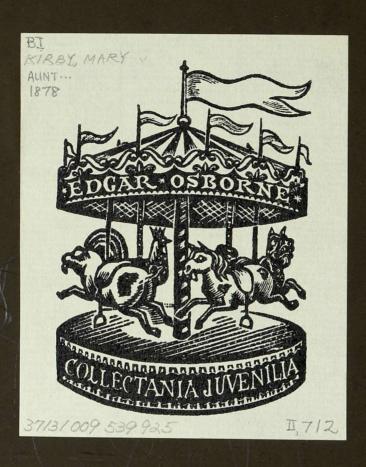
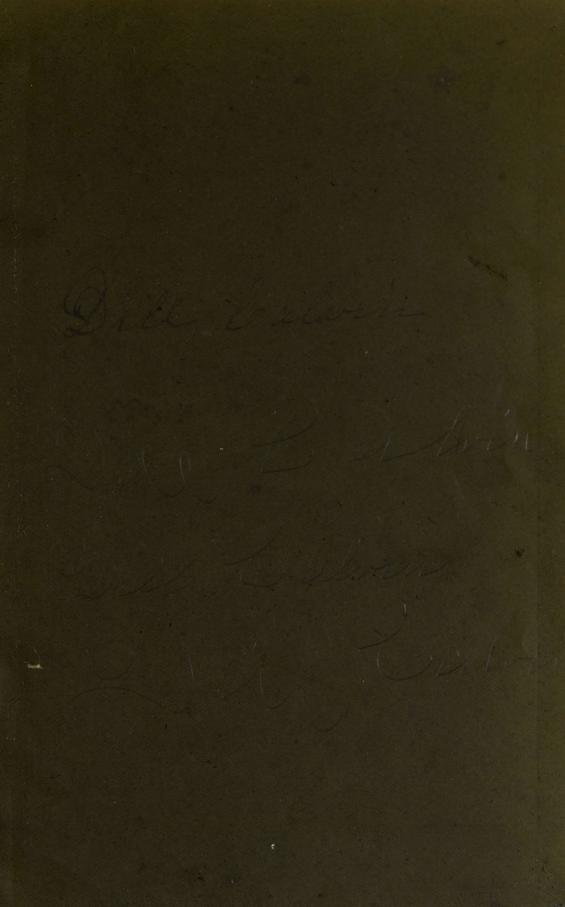
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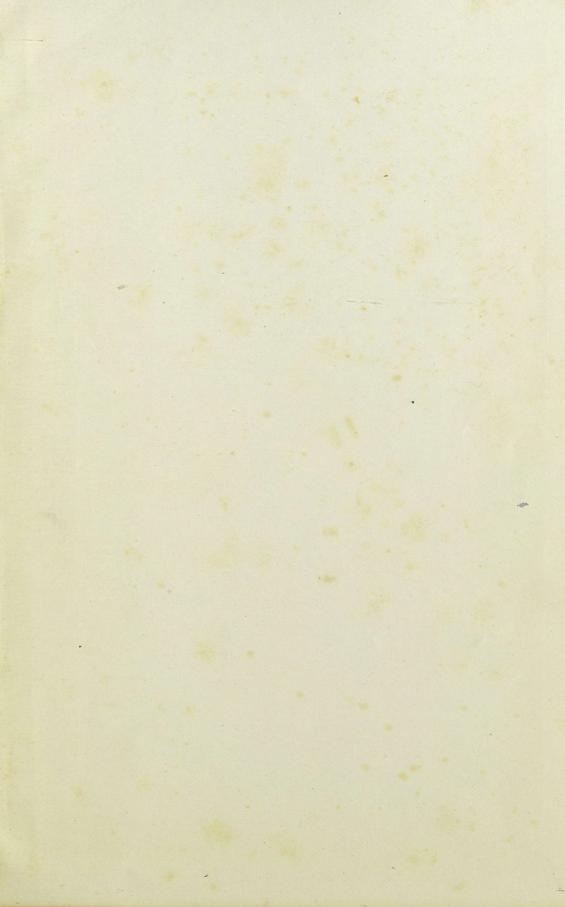
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Mary & Elizabeth Kirby



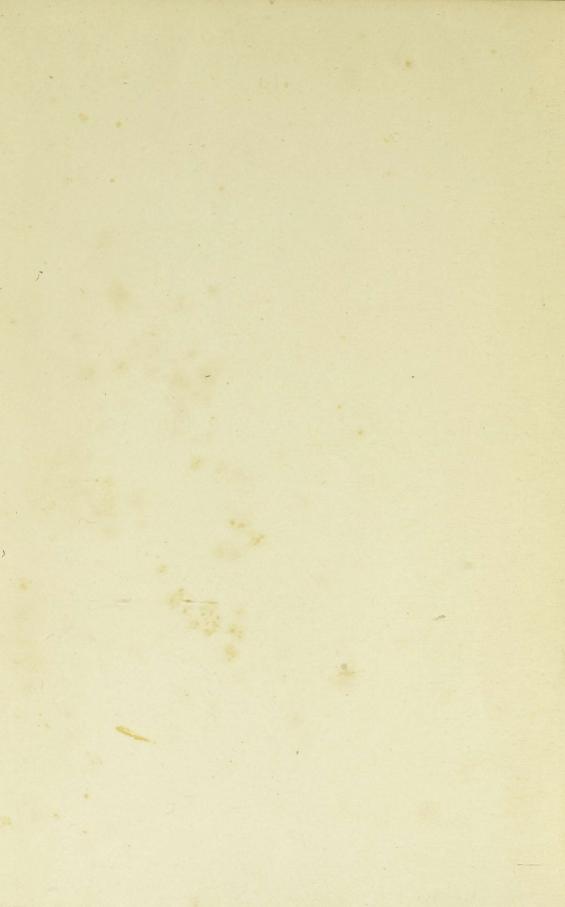




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AUNT MARTHA'S CORNER CUPBOARD.

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AUNT MARTHA'S CORNER CUPBOARD.

A Story for Little Boys and Girls.

BY

MARY AND ELIZABETH KIRBY,

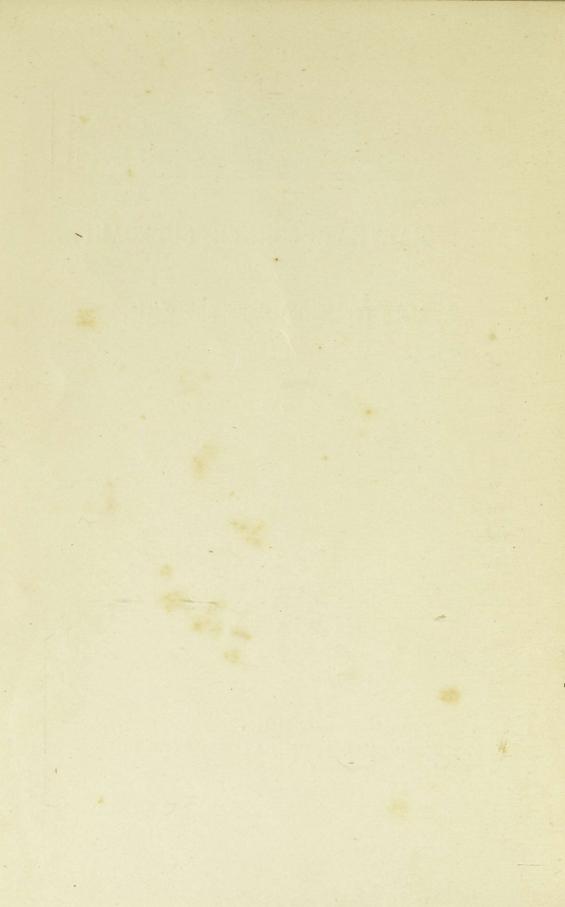
AUTHORS OF "THE WORLD AT HOME," "THE SEA AND ITS WONDERS," ETC., ETC.



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AUNT MARTHA'S CORNER CUPBOARD.

CHAPTER I.

THE CORNER CUPBOARD.

AM afraid that Charley and Richard Knight gave their master a great deal of trouble.

The school they went to had just broken up for the Christmas holidays, and neither of them had won a prize. Indeed, they were never likely to do so, judging from the way in which they went on.

They were good-tempered lads, and favourites with their playmates. If they had a cake sent them from home, they

always shared it with the rest of the school. And they were first and foremost at every game that was played. Their blue eyes were always twinkling with fun; and if they had been sent to Mr. Birch's Academy merely to enjoy themselves, it would have been all very well.

But it is of no use mincing the matter: they were the most idle lads in the school. Nobody could make them learn their lessons—not even Mr. Birch, though he was very strict, and now and then gave them a caning.

It was a pity they were so idle. Their papa was a learned man, and wished them to follow in his steps. It made him very unhappy when they came home without a prize; and always, by the next post, a long letter from the schoolmaster to complain that he could not make them work.

Their mamma tried to excuse them, and

said it was "time enough yet." But their papa was of another opinion, now that Richard had turned twelve; and he used to shake his head, and look very sad.

This cold, snowy Christmas the boys were not going home. It was a promise that they should spend the holidays with their Aunt Martha; and her old-fashioned carriage was at the door to take them.

They had not the least objection, for they were very fond of Aunt Martha, as indeed was everybody that had ever seen her.

She lived in a house with gable ends, just as you turn into the village. It was a very old house, and was said to have been built in the reign of King John. It was quite covered with ivy; and there was a large garden, but the snow had hidden everything in it.

The rooms were large, but very low.

The one Aunt Martha liked the best had the morning sun upon it, and looked into the garden. And here she had her worktable, and her basket of knitting, for her eyes were not very good, now she was getting old. And here she sat all the day long.

Close by was her corner cupboard, that she kept locked up, and the key was on a bunch that she carried in her pocket. She never left her cupboard open, because it had so many things in it.

The boys knew the cupboard by heart. Out of it came sweet cakes, and honey and sugar; and tops and marbles, and all the things they liked. And there were no tiresome spelling-books, or grammars, or anything of the kind, to plague them.

But you must not suppose that Aunt Martha was an ignorant lady. Far from it. She knew a great many things indeed, and she did not like the thought that her dear little nephews should grow up to be dunces, which was most likely to be the case.

Of course, she did not presume to think she could teach them so well as Mr. Birch, who understood Latin and Greek, and had kept a school twenty years. But she had a scheme in her head to teach them something.

Not that she intended them to learn lessons in the holidays,—that would have been extremely unkind. The knowledge she meant to give them was not to be found in their lesson-books, thumbed and dog-eared as they were; for an idle boy can wear his book out without using it. No; the lore she was thinking about was contained close by, in her corner cupboard

It seemed to Aunt Martha—for she was

a lady of a lively imagination—as if everything in that cupboard,—her china, her tea, her coffee, her sugar, even her needle,—had a story to tell, and a most entertaining one too. Had not many of the things been in foreign parts, where are great palm-trees, and monkeys, and black men, and lions, and tigers?

And if they had not been abroad, they were sure to have something to relate that the boys had never heard of.

The boys loved to hear stories told them. There was a time, just when it got dusk, before the lamp was lighted, or the tea and plum-cake brought in. Charley and Richard would have played about all day long, and pelted each other with snow-balls, and made slides on the pond, and scampered up and down the lane, till their legs, young as they were, began to feel tired. And then it was nice to sit on the hearth-rug

before the fire, and hear Aunt Martha tell a tale.

Now, Aunt Martha had prepared a great many tales, and had them, so to say, at her finger-ends. She had not to make them up as she went on, or that would have spoilt everything. Indeed, I almost think she had learned them by heart.

She hoped that when her dear little boys had heard all the curious things she was about to relate, it would make them want to read for themselves.

Charley and Richard had no idea of the trouble their good aunt was taking on their account, and they did just as they had always done. They trundled their hoops, and threw snow-balls, and scampered about to their heart's content. And when, at last, their legs began to ache, good old Sally, who had lived with Aunt Martha for nearly thirty years, fetched them in,

took off their wet boots and put on dry ones, and brushed their hair, and washed their faces, and sent them into the parloun to their aunt.

"She'll have a story to tell, I warrant," said old Sally, who was a little in the secret.

Now, everything happened just as it ought to do.

The boys wanted a story as much as ever, but, like the rest of the world, they wished for something new.

They were thoroughly acquainted with "Jack the Giant-killer," and entertaining as he had once been, they were by this time a little tired of him.

They knew "Cinderella" and "Little Red Riding Hood" by heart, and they did not want to hear them over again. Not that they could get really tired of such delightful stories, but they "might lie by,"

Charley said, "for one Christmas, and something else come out."

Aunt Martha was quite willing—indeed, this was just what she had been planning for. Her dear old face brightened up, and looked as pleased as could be, when Charley settled himself on the rug, and Richard brought a stool and sat close by, their merry blue eyes fixed intently upon her.

Then Aunt Martha began to relate her first story—"The Story of a Tea-Cup."





CHAPTER II.

THE STORY OF THE TEA-CUP.

OME," as I daresay you have heard it said, "was not built in a day."

People who use the expression, mean by it that nothing of any value can be done without a great deal of time and trouble.

The tea-cup seems a simple thing, and you use and handle it very often, and drink your tea out of it every afternoon. But perhaps you have never been told its whole history "from beginning to end," as the story-books say, and do not know that it takes a vast amount of labour, and sets numbers of persons to work, before it can become a cup at all.

I will speak of the best china, that is kept on the top shelf in the cupboard, and only comes out on high days and holidays. It is very superior, let me tell you, to the blue and white cups and saucers in the kitchen, that have no gold rim round them, and did not cost nearly so much money.

The word *china* will remind you of a country a long way off, where the gentlemen have great plaits of hair hanging down their backs, that look like tails, and the ladies hobble about in little shoes turned up at the toes.

The Chinaman drinks a great deal of tea, because he likes it, and the tea grows in his country. And the tea-cups are always being handed about on little trays, that everybody may have some. So the Chinaman has a great deal of practice in making tea-cups, and can do it remarkably well.

I am sorry to say he is not of an open

disposition, and likes to keep everything he knows to himself.

He would not tell the people who lived in other countries how he made his cups, though they were very curious to know, and asked him over and over again.

There is a town in China where a great many potters lived, and made their beauti-



CHINAMAN BAKING HIS CUPS.

ful cups. The streets were quite crowded with the potters, and boat-loads of rice came every day for them to eat.

There was a river close by the town; and

when the cups and pots were finished, they were packed and sent away in the boats. The potters' furnaces were always burning to bake the cups, so that at night the town looked as if it were on fire.

The potters would not let a stranger stay all night in the place, for fear he should find out the secret of the cup-making. He was obliged either to sleep in one of the boats, or to go away till the next morning.

But it happened that two strangers had been on the watch for a long time, and at last they thought they had found out the secret.

One day they bought some great squares, or bricks, that were being sold in the market and carried off by the potters. They felt quite sure this was the stuff the cups were going to be made of. Now the bricks were sold on purpose to be used in the potteries. They were made of a kind

of flint called *petunse*, that looks bright and glittering, as if it had been sprinkled with something to make it shine. And the Chinaman collects it with great care, and grinds it to powder, and makes the bricks of it.

The two strangers carried the bricks home to their own country, and set to work to make cups.

But, alas! they could do no kind of good. They were like a workman who had left half his tools behind him. For they wanted another substance to mix with the petunse, and that was called kaolin.

Now kaolin was dug by the Chinaman out of some deep mines, that he knew very well, and often went to.

It lay about in little lumps, and he picked it out, and made it into bricks just as he had done the other.

And he laughed very much when he

heard what the "barbarians," as he called them, had been trying to do. For he did not pity them in the least.

"They think themselves very clever," he said, "to make a body that shall be all flesh and no bones."

He meant that the *kaolin* was hard, and could not turn to powder when it was burnt as the *petunse* did; so that it was like bones to the cup, and made it firm. Indeed, without it the cup was too soft, and did not hold together.

I should not have told you this long story if it had nothing to do with the best china. But people can get a kind of clay out of our own county of Cornwall that does quite as well as the Chinaman's bricks, and the best china is always made of it. People come a long way to look for the "porcelain clay," as it is called; and they dig it out of the earth, and carry it to a

great building that is, in fact, a porcelain manufactory, where all kind of cups and saucers, and jugs and basins are constantly being made.

And as soon as the clay got there, it was thrust into a machine, where it ran upon a number of sharp knives that work round and round, and have been set there on purpose to chop it to pieces. When it had been chopped long enough, it was turned into a kind of churn, and churned as though it were going to be made into butter. Indeed, when the churning was over, the person who had churned it called it "claycream."

Other matters, such as flint and bone, were now mixed with it. But, in order that they might work in harmony one with the other, the flint and the bone had each to be ground to a fine powder, and then made like itself into "clay-cream."

The two creams, in two separate vessels, were carried to a room called "the mixing-room," and put into a pan of water and stirred well about.

They were stirred until they were quite smooth, and without an atom of grit.

But as cups could not be made of the clay-cream, it had to be made solid again. And it was boiled over a fire until the moisture was dried up, and it was very much like dough. A man now began to slap and beat it, and cut it in pieces, and to fling the pieces one on the other with all his might. And when he had slapped it long enough, he said it was quite "ready for the potter."

The potter was called "a thrower,"—and a good name for him.

He flung a ball of the clay on a little round table before him, with such force that it stuck there quite fast. The table was called a whirling table; and well it might, for it began to whirl round and round as fast as could be.

The reason why it whirled, was because a long strap went from it to a wheel in the corner, that a boy was turning. When the boy turned his wheel, the table turned as well. And as the table went round, the potter began to pinch, and pat, and work the clay about with his fingers and thumb, and give it what he called "a shape."

He could do just what he liked with the clay, and could make it into any shape he pleased.

He had some tools to help him, such as little pegs and bits of wood, with which he scraped it on the outside and pressed it on the inside, until he had brought it into the form of a cup. And all the while the wheel kept going round and round, until it was enough to make you giddy.

At last the wheel stopped, and so did the table. And the clay was taken off, to all intents and purposes a cup.

Aunt Martha had scarcely time to finish the last sentence before there was a tap at the door, and old Sally came in with the tea-things.

Now, the best china had been taken down and carefully dusted; for Christmas was looked upon as a high day and a holiday, and Charley and Richard were company, as a matter of course. As their heads were still running upon cups and saucers, they jumped up and began to look at them, and to talk about "flint," and "clay," and "kilns," in a very learned manner, and one that made old Sally smile.

Aunt Martha was very much pleased, for she saw that her story had been carefully listened to, and had not gone in at one ear and out at the other, as such instructive stories do sometimes.

And she was more pleased still, when her little nephews asked her a great many questions, and wanted to know more about "the tea-cup."

She did not tell them any more just then; for she was a wise old lady, and she wished to keep their curiosity awake, and not let them have too much of the subject at once.

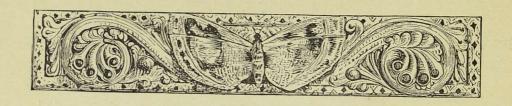
So she talked about something else all tea-time, and then she had out puzzles and bagatelle, and a great many other games, to make the evening pass pleasantly. But old Sally told her that when the boys went to bed, and she fetched away their candle, they were talking very fast about "the teacup."

And the next afternoon, when they had given over running about, and their hair

had been brushed, and their faces washed, they ran into the parlour where their aunt was sitting, and asked her to go on with her story, for they wanted to know a great deal more.

Now it was rather early, and Aunt Martha had hardly finished her afternoon's nap. But she did not like to keep the little boys waiting. So she roused herself up, put a log of wood on the fire,—for it was very cold,—and when Charley and Richard had settled themselves, she began, or rather went on with—"The Story of the Tea-Cup."





CHAPTER III.

HOW THE TEA-CUP WAS FINISHED.

the wheel. It was then set aside to dry; and very soon it reached what the potter called "the green state"—though he had better have said the "hard state," for it was getting gradually harder. It was next taken to the turning-lathe, and had all its roughness smoothed away, and its appearance very much improved. Still, the cup was by no means so handsome as it is now; and it had no handle.

The Chinaman makes his cup without a handle; and when tea-cups were first used in this country, they had no handles, and were very much smaller than they are now. People in those days could not afford to drink much tea at a time, it was so dear and so scarce.



THE POTTER AT HIS LATHE-MAKING A VASE.

But fashions are always changing, and in our days every cup must have a handle.

The handle was made separate from the cup, and fitted on afterwards. It was nothing but a strip of clay cut the proper length, and pressed into a mould to make it the right shape. The man who has to

do it, takes a great deal of pains to make it fit very neatly.

The parts where the handle was to join the cup were wetted with a certain mixture of clay and water, to make them stick; and they did so at once.

The cup was now put into a square box, or case, with sand at the bottom. Other cups were placed in with it, though care was taken to prevent them from touching each other. Another box, just like it, and full of cups, was set over it, so that the bottom of one box made a lid for the other. All the boxes, piled up in this way, were put into an oven, called "the potter's kiln." It was in the shape of a cone, and with a hole at the top to let the smoke out.

The Chinaman is at the trouble of putting each cup into a separate box, in order, as he says, that its delicate complexion may not be spoilt by the fire! When the cup is taken from the box, it is pure white, and nearly transparent. It is not yet thought worthy of the name of porcelain, and is merely called "biscuit china."

People were a long time before they found out how to paint pictures on the cup, or to give it its beautiful gloss.

The surface of the cup was not hard enough to hold the colours, and wanted a coating upon it that is called "enamel."

No one in England knew how to make the enamel, though the Chinaman did. But a potter named Bernard Palissy tried again and again to make it. Indeed, he spent all his time in trying first one thing and then another.

He made cup after cup, and coated them over with what he thought was the right thing; but not one of them would do. And at last he became so poor that he had no

wood left to heat his furnace—just at the time, too, when more cups were ready to go into it.

He wanted wood to such a degree that he became quite frantic, and felt that he must put something into his furnace, he did not care what. And he ran into the room where his wife was sitting, and snatched up the chairs and tables as if he had been crazy, and ran with them to his furnace.

Poor Madame Palissy wrote a book about her troubles, at which I do not wonder. It is a comfort to know that he succeeded at last, and earned a great deal of money. But many improvements have been made in tea-cups since his time.

Before the pictures are painted on the cup, it is nicely cleaned, to remove any atom of dust; and then it has to be glossed, or, as it is called, "glazed." The stuff that

gives it its gloss, and makes it shine, looks like thick cream, and is kept in wooden



PALISSY MAKING FUEL.

troughs in a room called "the dipping-room."

A man dips the cup into the trough, and turns it about in such a way that every part shall be coated, and yet every drop drained out.

It is now put on a board, and, with other cups, again baked, but in a cooler oven than before. When it comes out of the oven it shines with the beautiful gloss you see.

But it is not finished; for it is a bare cup, without any pictures of flowers or fruit, or figures like those on the best china.

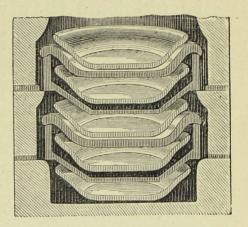
It is taken to a room where there are long tables, and a great many windows to let in the light.

People sit at the tables, with brushes and colours before them, and are busy painting the cups.

In China one man paints nothing but red, another paints nothing but blue; and so on. But here, in the painting-room, there is a little difference. One man paints flowers, another leaves, another fruit, and another figures. The colours they use are obliged to be made of metals—such as gold, iron, and tin—for nothing else can stand the heat of the furnace, in which the cups have once more to be baked. Indeed, the painter

now and then pops his cup or his saucer into the kiln to see how the colours will stand, before it is quite finished.

When the cup has been painted, and



SAUCERS PACKED FOR BAKING.

baked for the last time, it is taken to another room still, where there are a great many women and girls busy at work.

Each girl sits with her face to the light, and takes a cup in one hand, and a stone called an agate in the other. She rubs the parts of the cup that are intended to look like gold with the stone until they become of a brilliant gloss, and shine as if they were gold.

There is a place in Staffordshire called "the Potteries," where cups and pots have always been made.

In old time they were very rough-looking things, and had neither gilding nor gloss. But the people who used them were just as rough, and so was the country round.

The roads were very bad indeed, and full of deep ruts, so that no carriage could go over them. There were no towns or factories, and the potter lived in a little thatched cottage like a hovel.

He had a shed where he worked at his wheel and baked his pots. He dug the clay out himself, and his boys helped him to "throw" and "press," and do all that was wanted to be done.

When he had finished making his pots,

his wife used to bring up the asses from the common, where they were grazing, and get them ready for a journey. She put panniers on their backs, filled with her husband's pots; and then she set off, over the bad, rutty roads, to the towns and villages to sell them.

That part of Staffordshire is still called "the Potteries;" but it is very much improved—and has great towns, and factories, and good roads, and is not at all what it used to be.

One of the towns is called Burslem; and a potter named Mr. Wedgwood lived there. He spent all his life in making the cups of a more beautiful kind than had ever been made before. They were of a cream colour; and instead of the ugly figures that were in fashion then, he painted them with flowers and fruit, as we see them now.

One reason why he got on so well, was

because he took so much pains, and would not let anything pass unless it was perfect. If a cup came off the wheel with the slightest fault in it, he would break it to pieces with his stick, and say, "This will not do for me."

Charley and Richard were so interested in what Aunt Martha had been telling them, that old Sally tapped at the door twice before they heard her. And then, when she had brought in the tea, and the muffins hot out of the oven, they could neither eat nor drink for talking about "the tea-cups." And Richard began to wonder what Aunt Martha's next story would be about, and tried to make her tell him. But she did not think this would be wise; and all he could ascertain was that the subject of it would come out of her corner cupboard.

It was clear, however, that the story had done them good; for the next morning, Charley and Richard, instead of spending every moment in play, walked up and down the garden-walk, talking about the clay, and the glaze, and the enamel—things they had known nothing about before.

But their greatest pleasure was to come; for strolling out by the gate into the lane, they spied, all at once, some bits of broken pot. You would have thought they had found something very precious indeed, they were so pleased. They picked them up, and carried them off in triumph into the old tool-house, where Charley at once set to work with a great stone to pound them to powder. He had nearly broken them up, to mix with some clay that Richard brought out of the ditch, when the thought struck him that these blue and white pieces of pot were not like Aunt Martha's best china. He would go in and ask her if they were.

Aunt Martha was seated at her work-table, in the parlour, when the boys, with dirty hands, came running in. She sent them out again to wash their hands, and then told them that Charley was right. Her best cups and saucers had the patterns painted on them, and required a deal more skill to make than these.

Common blue and white cups—such as Charley had a bit of in his hand—were managed in quite another way. A paper, with the pattern printed on it, was wrapped round each cup. The cup was rubbed for a long time, and then set in water. The paper soon peeled off, but the blue marks were left behind.

Richard and Charley wanted to know a great deal more; but Aunt Martha would not answer any of their questions. So they

went back to the tool-house again, to play at potters. What delightful work it was! so delightful, that Charley made up his mind to be a potter as soon as he was old enough,—and if his papa would let him.

Richard said, if he was a potter he ought to go to China; and then he remembered his dog's-eared geography in his desk at school, and thought when he got back he would look into it, and see if it said anything about China. He should like to know a little more than Aunt Martha had told them.

That afternoon old Sally had to keep the boys from going into the parlour too soon; for their faces were washed and their hair brushed half an hour before the usual time.

But good Aunt Martha was ready; and when she heard their feet pattering along the hall, she got up and opened the door. Then Charley settled himself on the hearthrug, and Richard fetched a stool; and the boys were as still as mice while Aunt Martha told them—"The Story of the Tea."





CHAPTER IV.

THE STORY OF THE TEA.

TEA-CUP is not of much use, if it is kept only to look at. It wants to be filled with good strong tea.

I wonder what people did before tea was brought to England; for it is not, as everybody knows, a native of this climate. It grows in China, where the beautiful cups are made on purpose to hold it. And it was sipped by emperors on their thrones, and by their grand mandarins, many years before we knew anything about it. And even now, the best of the tea is kept at home for the benefit

of the Court, and it is only the next best that finds its way into our tea-pots.

About two hundred and fifty years ago, there was no tea in England except what people made of the herbs that grew in their gardens, such as mint, and thyme, and sage; no one, not even their majesties the kings and queens, had ever tasted a cup of real Chinese tea.

But it happened that in the year 1610—for I daresay you would like to know the date—some Dutch ships brought a little tea to Holland; and then a little more was brought home to England, and people talked about it as "a new drink that came from China."

Everybody would have liked to taste some of it, but it was very difficult to get; and when a present of two pounds of tea was made to the king, he thought it a very handsome gift indeed.

Not many people could buy tea in those days; and even when they did get it, they hardly knew whether it was to be eaten or drunk.

There is a funny story of two old people, who had an ounce of tea sent to them, and who were quite at a loss what to do with it. At last, the old lady proposed to her husband that they should sprinkle it on their bacon, and eat it; which they accordingly did—and very nasty it must have been.

By slow degrees, however, tea found its way to every home in England; and in these days every one can afford to buy it. It is welcomed in the palace of our royal lady the Queen, and it affords refreshment to the poorest cottager. A cup of tea is equally grateful to all.

It must be confessed that tea makes its appearance under great disadvantages. No one who has seen it growing in the Flowery

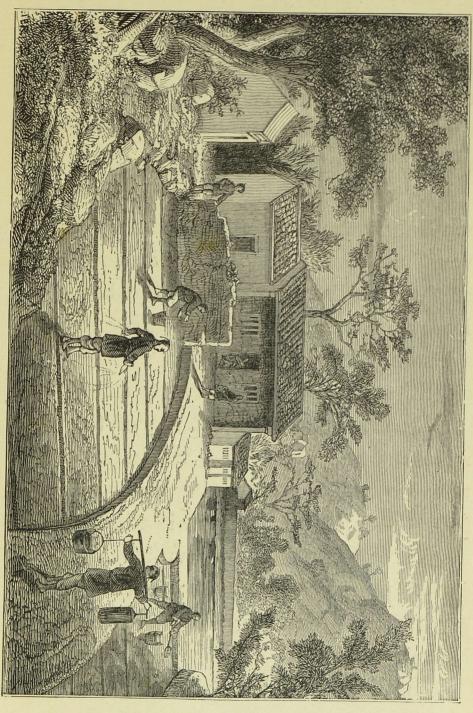
Land of its birth, can suppose it to be the same thing. And it is rather whimsical as to where it does grow. The north is too



cold, and the south is too hot; but there is a middle tract of country neither too hot nor too cold, that suits it the best.

It is called by the Chinaman Teha or Tha, and from this word comes our English name of tea.

It has white flowers, a little like the wild rose; and when the flowers are over, there come some green pods, that contain the seed.



The Chinaman is very careful how he sows his seeds, because his next crop is to come from them. And he sows six or seven seeds in one hole, to be quite sure that some of them will come up.

The leaves are, as you may suppose, the most important part of the plant. They are very handsome and glossy, like the leaves of the camelia that lives in the hothouse. But it is not on account of their beauty they are so much valued; they have some good qualities that no other leaves possess.

When a person drinks a cup of tea, how refreshed he feels! That is because of the reviving and strengthening quality in the leaf. The leaf also has in it a bitter substance called *Thein*—or, as it might be styled, pure extract of tea; and this has a great effect in taking away the feeling of being wearied.

The Chinaman has his tea-plantation,

STRIPPING OFF THE LEAVES.

just as we have our vegetable-garden, or the Irishman has his potato-ground. It is called "a tea-farm;" and the farmer lives close by, in a funny little house, like a pagoda, with long pointed eaves to it.

He and his wife are always busy in the plantation, for she helps him to weed and water, and her feet have no little shoes to pinch them. She could not afford to hobble about as the fine ladies do, or to be carried in a sedan.

In the early spring, when the young leaves were newly put forth, and had a delicious flavour, the family began to be very busy. The children came into the plantation and stripped them off, until the branches were nearly bare. But they left enough for another gathering by-and-by.

Of course the young tender leaves were the best, and made the nicest tea. The Chinaman called it *Southong*. When the leaves that are left get older, they are gathered; but they are not so delicate, and people do not like them so well.

There is still a third gathering, but this is worse than the last, and makes very poor tea.

When the leaves are stripped off, they are thrown into some shallow baskets, and set in the sun, where the wind can blow on them to dry them. They are then put in a pan, and placed on a stove with a fire under it, to be dried still more. While they are over the fire, they are stirred about with a brush until they are quite dry.

You may see that the tea-leaf is rolled up and crumpled, and that it comes straight when it is put into the water. The Chinaman takes the trouble to roll it in this way. He does it at a board, and rolls the leaf between his fingers. After this has been done, he again dries the leaves over the fire.

He takes a good deal of pains to pick out all the bad leaves and throw them away. He knows his tea will be looked at, before it can be sold to a person who knows good tea from bad.

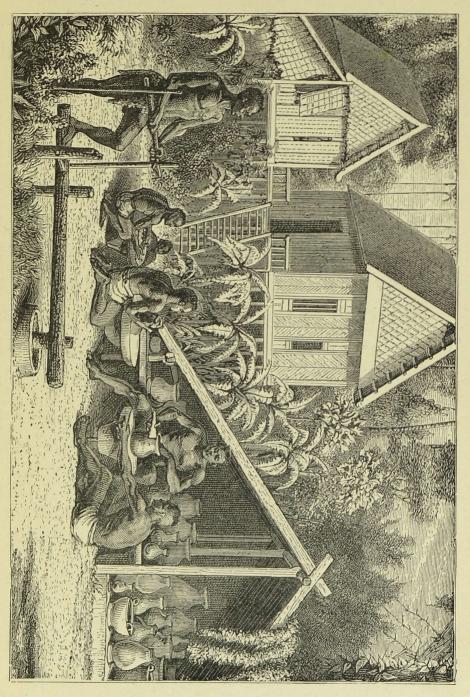
This person is a tea-merchant, and lives at the next town. All day long, the farmers keep coming into the office where he sits, with chests of tea slung over their shoulders. They want him to buy, and he is quite willing. Indeed, the more he can get the better, for he wants to send it in a ship to Europe.

But he always makes the farmer open his chest and spread his tea out before him. He looks at it very sharply, and takes it in his hand and smells it; and he would find out in a minute if any bad leaves were left in it. But if it is really good tea, he gives the farmer some money, and sends him away, leaving his tea-chest behind him. The farmer goes to the market and lays out some of his money,—though he is very saving and thrifty, or he would not be a Chinaman.

It was a good thing that old Sally just then came in with the tea, for that was what Charley and Richard wanted. Not that they were either hungry or thirsty; but it was delightful to jump up and look at the tea in the caddy, as Aunt Martha took it out with a scoop.

It was better still to watch the water being poured on it, and to see the tealeaves begin to unroll themselves and to get quite flat. Charley clapped his hands with glee, and they both skipped round the room, saying they had never enjoyed a cap of tea so much as now they knew something about it.

For I am afraid they were sad little



dunces; and if they knew that the tea was a plant at all, it is more than could be expected.

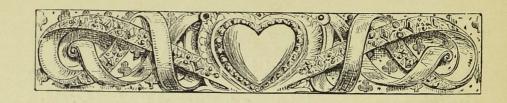
But it is never too late to mend; and the very next afternoon Charley and Richard found their way to a room they had never much cared about before. This room was called the library, and had rows and rows of shelves, with many books upon them.

But besides the books upon the shelves, there were others on the table. And Charley, who was thinking very much about foreign countries, was glad to find a book lying open on Aunt Martha's desk, telling all about India and China. It was full of pictures; among them were some of potters making cups and other vessels, and of people picking off the leaves of the teaplant.

How quickly the time passed in looking at them! Instead of being tired of doing nothing, as Charley very often was when it rained and he could not play out of doors, the time seemed to fly; and Aunt Martha had finished her nap and taken her knitting, and was ready to tell her story, almost before they were ready to hear it.

Not that they were a moment too late; oh no!—they wanted very much to know more about the contents of Aunt Martha's corner cupboard, and were very glad when, without any delay, she began—"The Story of the Sugar."





CHAPTER V.

THE STORY OF THE SUGAR.

mas pudding would be nothing without it; and the plum-cake, and the tarts, and the custards, and all the nice things that little boys are so fond of, would have no sweet taste in them if it were not for the sugar.

But its range is much wider than this. It is found in the ripe peach on the wall, and in the juicy nectarine. The bee knows the taste of it right well, and finds it hidden deep in the bell of the flower. It lurks in the grape, and the orange, and fruits too many for me to name.

And it finds its way into the stems of plants, and makes their juices sweet and delicious. There is a tall, reed-like plant, with a yellow stem. It is called the sugar-

cane, because there is so much sugar in it.

In some places, people are always chewing it. They cut it with their knives to make the juice come out, and go on cutting and chewing all day long.

The sugar-cane grows in very hot countries,



THE SUGAR-CANE.

where black people live and monkeys run about on the trees. The burning sun pours its rays full upon it; but this is what it likes, and what makes its juice so sweet. There is an island that belongs to England, and is called Jamaica; and the sugar-cane



A SUGAR-MILL.

grows there, and we get a great deal of sugar from it. At one time the black people who made the sugar and took care of the canes were slaves, and were bought and sold in the market; but one happy morning they were all set free.

A great giant called *Steam* helps to make the sugar now, and does more than all the black people put together. People did not all at once find out how helpful he was, and that he could turn mills, and push carriages, and do all kinds of things. But they were very glad when they did know it; and when he began to help them to make the sugar. For weights, and rollers, and heavy wheels are nothing to him.

A sugar-plantation is a very pretty sight. The tall yellow canes rustle in the wind; and at the top is a tuft of flowers, that looks like a silvery plume. And here and there black people are busy at work, hoeing and weeding. The women have blue and scarlet handkerchiefs tied round their heads, for they dearly love a bit of finery.

Sometimes, in the middle of the night, when all is still and cool, and the moon is shining, a troop of monkeys come racing down from some mountains near. Then woe betide the sugar-canes!



A SUGAR-PLANTATION.

The monkeys love the taste of sugar; and they clutch at the canes with their long fingers, and pull them up, and bite them, and do a great deal of mischief. Happily, the black man has a fancy for roasted monkey,—a dish we never see in England; and he thinks it no trouble to sit watching hour after hour, with his gun in his hand, waiting for the monkeys.

Down they come on the full run, and do not all at once see him. But pop goes the gun, and one or other is sure to be shot.

It is time that I told you of a fact connected with the history of the sugar-cane. The stem is not hollow like the grass or the reed, but it is solid, and filled with the sweet juice we have been talking about, and that makes the sugar.

But the juice, before anything is done to it, is very wholesome, and people who suck it are sure to be strong and healthy. Even the horses that work in the sugar-mill get as fat as can be, for they are always chewing the canes. And nothing fattens poultry half so well,—and there are plenty of

fowls pecking about in the negro's little garden.

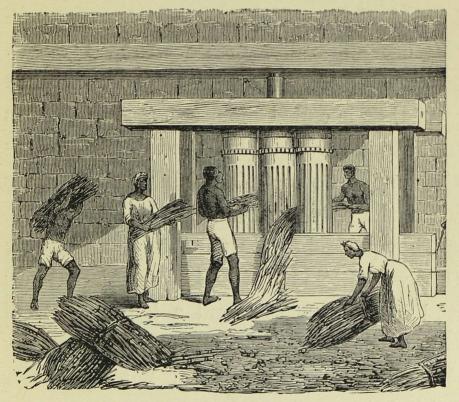
But the juice is too good to be wasted. It forms the material of that vast supply of



CUTTING THE CANES.

sugar met with everywhere, in every town, and village, and household. And it has to go through a great many stages, and pass through a great many hands, like the tea-cup.

In the first place, the beautiful yellow canes are cut down close to the ground, and tied up in bundles. Then they are carried to a mill, and the big giant Steam,



IN THE SUGAR-MILL.

in places where he has been set to work, sends great iron rollers over them, and squeezes out every drop of juice.

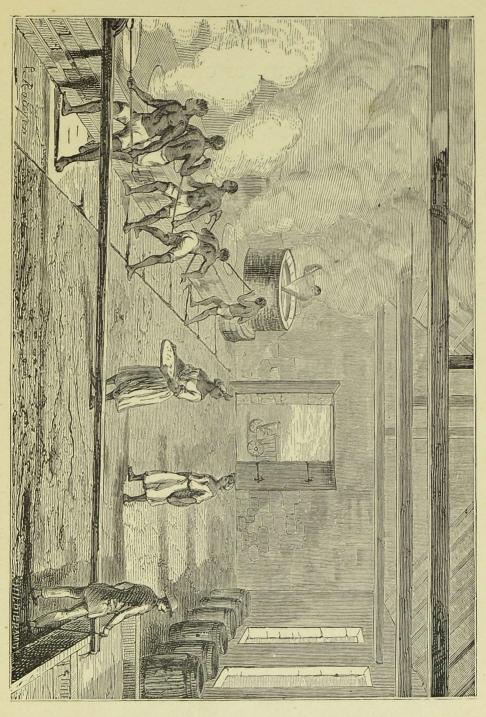
The juice runs into a cistern, and is made

hot, lest it should turn sour; and a little lime is put in with it, to make it clear, and then the liquor is boiled very fast indeed.

When it has left off boiling, and is set to cool, there will be a great many spark-ling crystals in it, which are the real sugar. But the crystals are mixed up with a thick stuff that is called molasses, and which has to be got away. This used to be a very tiresome process indeed, in the old days when the poor slaves made the sugar.

They poured the liquor into a great many tubs with little holes at the bottom of them; and it was left to stand a long time—till the thick stuff or molasses had slowly drained through, and had left the sugar behind.

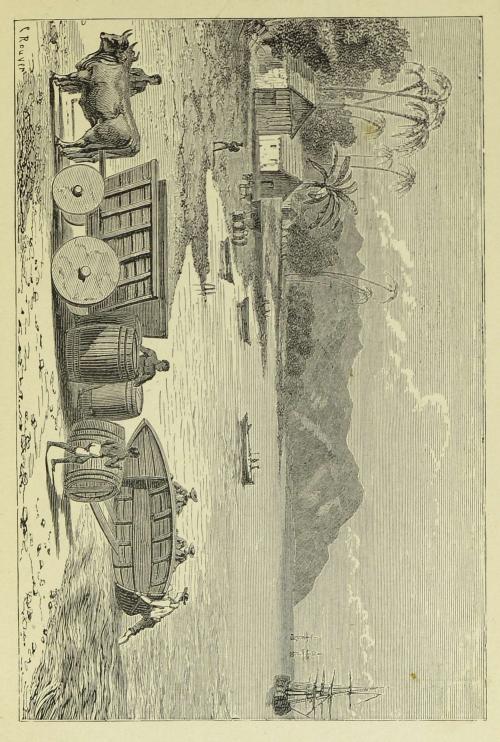
But now the giant Steam is set to work, all this is done as quickly as can be. The liquor is poured into a large square box made of iron, and divided into two cham-



bers, an upper and a lower. The liquor is poured into the upper chamber, on a floor made of wire like a sieve. Then the goodnatured giant begins to pump the air out of the lower chamber. Now nature abhors a vacuum, and always finds something to fill it. So the liquid molasses come pouring down, through the sieve, into the lower part of the box. The sugar that has become crystallized cannot run through the sieve, for the holes are too fine for it to get through; so it is left behind, and that is just what the sugar-maker wants.

All this is done in two hours, while in the old-fashioned way it used to take eight days.

The food with which the giant fills his capacious maw is the raw sugar-cane, after all the juice has been squeezed out. It burns well, and there is plenty to be had, and it does not cost a penny.



When the sugar is made, it is packed in great casks, and sent to Europe.

After it gets here, some of it goes through another process, and is made quite white, and into tall cone-shaped loaves. This is called "lump-sugar;" and the other goes by the name of "raw."

Aunt Martha had hardly finished speaking when Charley, who was seated before the fire with his elbows on his knees and his chin between his hands, observed that monkeys had a better time of it than boys had. If he had been a monkey, he should not have minded. Just think how pleasant it would be to pop down among those sugarcanes!

Richard said he did not think so. Charley might like the chances of being shot, and roasted for a black man's dinner; but he preferred less sugar and a safe life. Not that he pitied the monkeys for being shot; it served them right for being so greedy as to pull down the canes.

Charley could not agree with this. "Sugar," he said, "was so tempting—no-body knew how tempting," added he, rising and looking wistfully at the old-fashioned sugar-basin heaped up with lumps of sugar, which old Sally was taking out of the corner cupboard. That basin was very full—too full; he feared that top lump would topple over. A remark which made Aunt Martha smile, and say that if he could find a safer place for it, he might.

Charley said he knew of one much safer; and, opening his mouth, waited for old Sally to pop it in. Then he thanked his aunt by an embrace, and they sat down to tea.

The next morning the two boys were early, and went into the kitchen just as old Sally was putting the coffee-berries into

the mill to grind for breakfast. Charley asked where they came from, and what they were. Old Sally said she was not book-learned; if they wanted to know, they had better ask their aunt.

The boys said they must; but that when they got back to school they would try to learn a few things for themselves.

Sally thought they had better be quick about it; for if they did not learn while they were young, they were not likely to know anything when they were old. And there were not many Aunt Marthas in the world. What a long tale she had told them last night!—too long, said she slyly.

Charley said, Not a bit. He meant to ask for a longer one to-night. He wanted to know all about the coffee.

So when Aunt Martha came down, it was agreed that her next tale should be—
"The Story of the Coffee."



CHAPTER VI.

THE STORY OF THE COFFEE.

ily on the window, and the snow-white cloth is spread on the table, coffee is always present. There are few breakfast-tables in the kingdom where it is not to be found.

You may know it is there by the pleasant odour it spreads around. It is as nice to drink as tea, and a great deal more strengthening. Many a poor man can work hard from morning till night, and not drink anything stronger than coffee.

It was a long time before coffee was brought to England; but in the reign of

Oliver Cromwell, a merchant who used to go backwards and forwards to Turkey, to trade there, brought home with him a Greek servant. This man had tasted coffee—for the Turks drink a great deal of it, just as the Chinese drink a great deal of tea—and he knew how nice it was.

He brought some berries home with him, and used to make coffee, and let people in London have some of it. Indeed, at last he got so famous for his coffee, and so much talked about, that he set up a coffee-house; that is, a house where coffee is sold instead of beer.

Perhaps you would like to know where this first coffee-house was, for there are plenty of them now in every town in England. It was in George's Yard, Lombard Street. This Lombard Street is in the very heart of the business world; and it gets its name because some Jews from Lombardy once came to live there,—who used to lend money, for which they made people pay a great deal.

Bankers now live in Lombard Street, and their name comes from the Jews. The Jews had benches with their bags of gold upon them, and there they used to stand and carry on their trade. Now, banco in Italian means bench; and this became corrupted into banker, a man who lends money as the Jews did, only in a more honest manner.—But all this has nothing to do with coffee.

From the little coffee-house in Lombard Street, the habit of drinking coffee spread all over the country.

At first, like tea, it cost a good deal of money; and it was brought from only one small province in Arabia, called *Yemen*.

I should tell you that Arabia is divided into three parts. One is all stones and

rocks; and another all sand and desert. But there is a third region, called "Happy Arabia," that is full of gardens and vine-yards, and olive-trees. And here is the province of Yemen.



MOCHA.

Mocha is the chief town, and the place where the coffee came from. It stands close to the sea-shore, on a very sandy plain, and at the entrance to the Red Sea. The entrance to the Red Sea is through some dangerous straits called "Bab-el-mandeb," or "the Gate of Tears," because so many ships are wrecked there. Indeed, the Arab, who is very fanciful, says that the spirit of the storm is always perched on a rock that overlooks the straits.

Any lady in Mocha, when she goes out for an evening visit, carries on her arm a little bag of coffee, and has it boiled when she gets there. And all over the town people are to be seen lying on the ground, under awnings spread to screen them from the sun. These are their coffee-houses; and there they do nothing all day but sip coffee and smoke their pipes.

The people at Mocha pretend that they like coffee best when it is made of the husk of the coffee-berry, and not of the berry itself.

But all the coffee that Mocha and the

province round could supply was very little, compared to what comes to England now; and of course the price of coffee was extremely high. So, when it began to be so much liked, the kings and queens in the different countries of Europe set about having coffee planted in all places where it would grow.

The French sent some coffee-plants to one of their islands in the West Indies, in order to have a plantation there. An officer had the care of the plants, and he sailed in a ship from Amsterdam. He had a long and very stormy passage, and the wind prevented the ship from getting on.

It might be said of the people on board as it is in the poem,—

"Water, water everywhere,
And not a drop to drink!"

In fact, the water on board was nearly all used up, and no more was to be had until

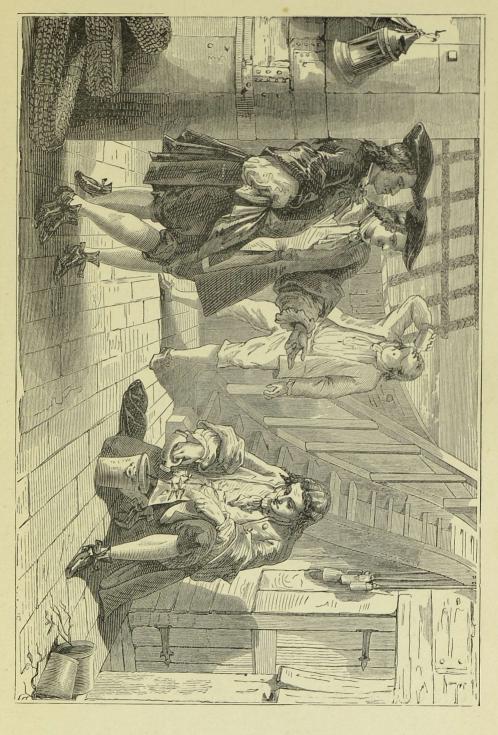


they came to their journey's end. Each man was allowed only a very small quantity a day, and they had often to suffer from thirst.

The French officer had no more given to him than the rest, and he would gladly have quenched his thirst. But, alas! the tender plants he was cherishing with such care began to droop. They too wanted water; and rather than let them die, he went without himself, and poured the scanty supply given him on their roots.

The crew laughed at him, and he had to bear a great many rude speeches. But, thanks to this act of self-denial, the plants were able to live until the vessel came at last to land. Then the brave officer received his reward. The plants grew and multiplied, and became great plantations, that supplied other countries and islands.

Many places now furnish coffee in the



greatest abundance. Brazil sends out enough almost to supply the world. The plant had grown wild in the island of Ceylon from the earliest times; and the



COFFEE-PLANT IN FLOWER-AND FRUIT.

natives used to pluck the leaves and mix them with their food to give it a flavour; they also made garlands of its flowers to decorate their temples; but it was a very long time before they made any use of the berries.

When the coffee-plant is left to nature it grows rather tall. But, as a rule, its top is cut off to make it throw out more branches.

The leaves are ever-green; and the flowers are white, and a little like those of the jessamine.

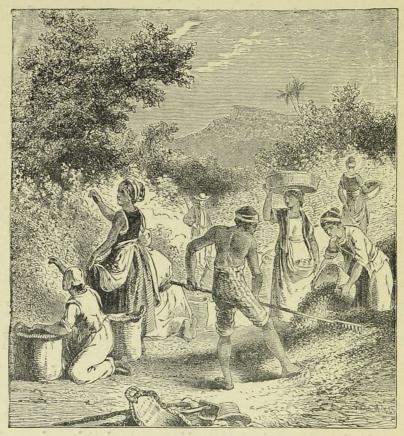
When the berry is ripe it is red, and like a great cherry. There are two hard seeds in it, like beans, that are known to every one, for they are ground into coffee. In many plantations they fall to the ground, and lie under the tree until they are picked up. But in Arabia this is not allowed to be.

The planter, as he is called, spreads a cloth on the ground, and then shakes the tree, so that the ripe berries drop off. He then puts them on mats, and lets them lie in the sun till they are dry. And then the husk is broken by a roller, and the berries got out.

All his trouble is amply repaid, for this Arabian coffee is the best in the world.

The coffee-berries have still to be roasted,

and then ground to powder. They are brought to England, however, before they are ground. Many people have little coffee-



GATHERING THE COFFEE-BERRIES.

mills in their houses, into which the berries are put, to be ground for breakfast. By this means they can obtain the coffee in a state of purity. For it is the custom

in these days to mix the ground coffee with the roots of a plant called chicory, to make it go further. This is done to such an extent, that a law has been made obliging the person who sells the coffee to declare whether it is pure or not. And if it is mixed, he is obliged to print on the packet the words, "Coffee and Chicory."

The coffee-plant has a great many enemies. Wild cats climb up the stem and run along the branches to get at the berries; and the squirrel nibbles them as he does nuts; to say nothing of the monkeys, who are always ready for a taste.

In Ceylon, there is a kind of rat that lives in the forest, and makes its nest in the roots of the trees. It comes into the plantation in swarms to feed on the berries. Its teeth are as sharp as a pair of scissors; and it gnaws through the branch that has the fruit upon it, and lets it fall to the ground, where it can feast at its leisure. It is very provoking to the planter to find all the delicate twigs and branches cut off, and he wages war against the rats.

The natives of the opposite coast of India think the flesh of the rat, fed as it is on such delicate fare, very nice, and they come and work in the plantations on purpose to get as many of them as they can. They fry them in oil, and make a dish of them with hot spices, and call it "currie."

The little boys were sorry when Aunt Martha came to the end of her "story of the coffee," and wanted to know a great many things about the brave man who went without drinking, in order to water the plants, and get them safe to their journey's end.

Aunt Martha could not answer all their questions, for she was tired of talking, and wanted her tea. But she made a promise

that the next time she went to London, if Charley and Richard were there, she would take them into a coffee-house and give them each a cup.

Charley said it was a long time to wait for that treat; but if their aunt would let them, they should like to get up a little sooner each morning, and grind the coffee for breakfast. And then they remembered old Sally's ignorance, and how they must tell her where the coffee came from, and all about it.

Yes, it was very pleasant indeed to know a few things, and to be able to teach other people. And Richard thought of a little schoolfellow of his, and of how much he should have to tell him when he got back to school.

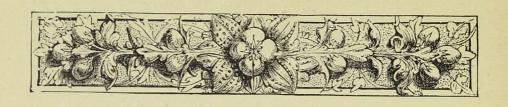
When old Sally brought in the tea, she set a dish of new-laid eggs upon the table, and Aunt Martha gave one to each of her

guests. Charley was talking away, and not thinking of what he was doing, so he upset the salt-cellar, and spilt all the salt on the tablecloth. Aunt Martha asked him if he knew where salt came from. He answered very quickly, "From the shop." But then Richard wanted to know where the shopman got it from.

Instead of telling them, Aunt Martha said it was well for Charley that he did not live in olden times, when salt was very scarce, or he would have got into disgrace for wasting it. For in those days it was dear, and people took much more care of it than they do now. One large salt-cellar used to be set in the middle of the dinner-table, and everybody helped themselves to a little. It was the custom for the master and mistress to sit above the salt-cellar, and all the servants to take their places below it.

Yes, indeed, he would have got into trouble then, if he had spilt the salt. And Aunt Martha promised that to-morrow night she should tell them—"The Story of the Salt."





CHAPTER VII.

THE STORY OF THE SALT.

HERE is something on the lower shelf of the corner cupboard, that is of more importance than many of its neighbours.

You might contrive to live without either tea or coffee, as people were obliged to do in years gone by, when they drank stout ale for breakfast, and had dinner at twelve o'clock. But what would you do without salt? What would become of your nice relishing dishes, if salt did not season them? They would taste no better than white of egg.

Nay, you would not have those rosy

cheeks, nor be able to scamper about from morning till night as you do now. You would be pale and sickly; and I hardly think you could live, without the little harmless doses of salt you are always taking in some form or other.

In a part of the world called North America, the cattle and the deer come a long way to get a taste of salt. The salt is in some well or spring that bubbles up among the grass; and the water leaves it behind like a crust on the stones that may chance to be lying about; and the grass all round tastes very much of salt.

The place is called a "salt-lick," because the cattle keep licking at the stones. They are sure to find their way to the salt-lick, even though they live miles away. And they keep cropping the grass, and licking the salt, till they have had enough, and then they go home again. They make a path on the grass with their hoofs, and quite tread it down. The hunter knows what the path means the moment he sees it, and he lies in wait with his gun. The poor deer is sure to come before long, or the buffalo with his great horns, and then the hunter shoots at them.

The man who owns the salt-lick very often begins to bore down into the ground. He thinks he may find a salt-mine, or, at least, a way underground that leads to one, and then he can get quite rich and become a person of importance.

A man once came to a salt-lick and tasted the water. He found it was all right, and that when he boiled some in a kettle and let it get cold there was a crust of salt at the bottom. He was highly delighted, and bought the land, and set people on to bore. But, alas! there was no salt to be found anywhere. A cunning hunter had

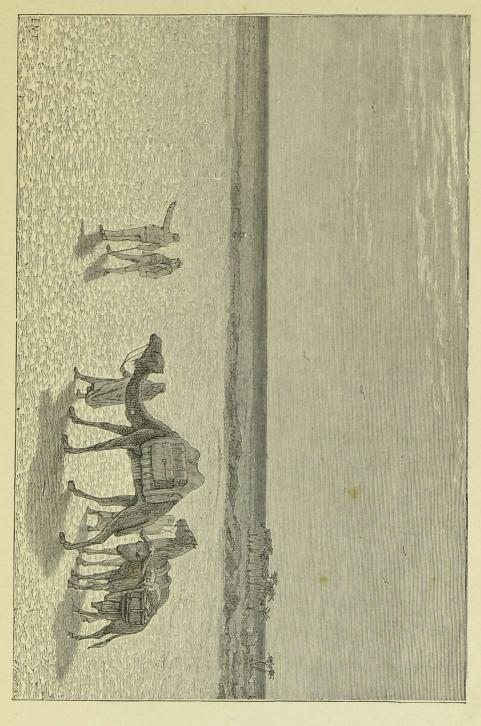
put salt into the spring, and sprinkled it on the grass, to entice the deer, and make them believe the place was a saltlick. And so the poor man had spent his money for nothing!

In some places the salt-licks are very far apart, and the cattle can hardly ever get to them. The cattle have plenty of food, and large rich pastures to browse in; but they long for a bit of salt, and there is none for them. Once a fortnight their master lets them come home to the farm, and gives each of them a bit of salt. The cows and horses know the right day as well as can be, and they set off at full gallop to the farm. The farmer is quite ready for them; and when they have had their salt they trot back again to the fields, as contented as possible.

In Norway, when the farmer's wife goes out with her maidens to collect her cows and have them milked, she takes a bowl of salt in her hand. The moment the cows see it, they come running up from all parts of the field, as if asking for some. Their mistress gives each of them a large spoonful, and expects them to be satisfied. But sometimes a cow is greedy, and wants more, and keeps pressing to the bowl until it becomes quite troublesome; and then the mistress gives it a box on the ears with the wooden spoon, to teach it better manners.

There is a desert in Africa where the ground under foot is not sand but salt. It is called the "Salt Desert;" and the salt sparkles in the sun with such a crystal whiteness that people who travel upon it are almost blinded.

Because salt is so useful and so necessary, it is found in great abundance. The great wide sea could not keep sweet and fresh



without salt. People put the sea-water in large shallow pans, and let the sun dry it up. The salt found at the bottom is called "bay salt," and is very bitter. And sometimes it is mixed with other things,—such as a relation called Epsom salts, that has a disagreeable taste, and is used as a medicine.

But the salt makes its way from the sea by all kinds of secret paths under the ground, and then it is found in places called mines, and is named "rock salt." The mine is like a great deep cavern, and has tall pillars of salt to hold up the roof; and the roof, and the walls, and the pillars glitter as though they were covered with precious stones.

When any person of consequence comes to visit the mine, the men who are at work make a great illumination. They stick torches here and there as thickly as they can, and then light them up, so that the place looks like a fairy palace.

The mine I am speaking of is near the town of Cracow in Poland, and it is not very pleasant to be let down. The person is let down in a hammock by means of a rope; and he goes down, down, a very long way. When he stops, he is not at his journey's end; for he has to get out of his hammock, and go along a pathway that descends lower and lower, till it reaches the mine.

The pathway is sometimes cut into steps, like a great wide staircase, and glitters with the light of the torches that the miners carry in their hands. And the road leads through a great chamber or room where a thousand people might dine.

When the traveller reaches the mine he finds himself in a country under ground, such as perhaps he had no idea of before.



A SALT-MINE.

There is neither sun nor sky. But there are cross-roads, with horses and carriages

going along them. And there are crowds of men, women, and children, who live always in the mine. Some of the children have lived there all their lives, and have never seen the daylight.

Most of the horses, when once taken down, do not come up again. There are numbers of caverns, little and big, and some of them are made into stables, and the horses are kept there. The roofs of the caverns are supported on pillars of salt, and roads branch from them in all directions. They reach so far, and wind about so much, that a man may easily get lost. If his torch happens to go out, he wanders about until his strength is quite gone; and if nobody finds him, he lies down and dies.

I have read of a salt-mine—also in Poland—in which there is a pretty chapel cut out of the salt, and called the "Chapel of St. Antony."



THE CHAPEL OF ST. ANTONY.

The King of Poland used to be the owner of the mines; but Poland has no king now, and they belong to Austria.

There are some grand salt-mines in our own country, and perhaps I ought to have told you about these first. They are at a place called Nantwich, in Cheshire; and people are let down in a great tub. When they reach the bottom of the mine, there is the same glittering light from the torches. The torches are what the miners have to see by.

Aunt Martha concluded by remarking how much pleasanter it is to live above ground, and see the cheerful light of the sun, and to walk in the green fields, and to breathe the fresh air. Did not the boys think so?

Charley said he did; but if ever he went down into a mine he should mind and take a box of matches with him. He thought then if his torch went out, he should stand quite still and light it again.

Aunt Martha agreed with him that would be the best plan, but she hoped they might never have a chance of trying it.

Charley wondered at the cattle liking salt so much. He could understand them liking sugar, but salt was not nice at all—and he put a little into the palm of his hand to taste. It was very well with egg or potatoes, but he should not like to lick it as the cattle did.

Richard said the coachman had told him that salt was very good for horses, and made their coats finer; and that when they could not get it they were neither so well nor so handsome.

Aunt Martha said that was quite true.

But at this moment their attention was diverted by Sally's placing on the table a large plum-cake. Now the boys had seen this cake being made, and had asked old Sally ever so many questions about the currants she was putting into it. Did they grow on trees? Did they come from the same country as the coffee? For Charley had told her the history of the coffee—and indeed all the other stories; and Richard had begged, as she did not seem to know anything, that she would begin to read for herself!

So the arrival of the cake brought the currants to mind, and both the boys began to question their aunt about them. But Aunt Martha said it was tea-time now, and she could not answer any questions. She hoped they would find the cake all the nicer for the currants that were in it, as she believed old Sally had put them in on purpose for them. At which Charley laughed a merry laugh, and begged Aunt Martha, if she was rested by to-morrow night, to tell them—"The Story of the Currants."



CHAPTER VIII.

THE STORY OF THE CURRANTS.

EOPLE use quite a wrong word when they talk about currants, meaning the currants we buy at the grocer's shop, and which are not in the least degree related to the red and white bunches that hang in summer from the bushes in the garden.

The mistake arose from the name of one of the places where the currants grow, and that is called "Corinth." People chose to speak of them as "Corinths," and in time the word became changed into *currants*. Currants, indeed! Why, they belong to the elegant family of grapes, that hang in

white and purple clusters in the vineyards abroad. They too grow upon a vine, and are nothing in the world but grapes!

It is also as much a mistake to call them plums, and talk about a "plumpudding," when there is not a single plum to be found in it.

The little bush-like vine, on which the currants grow,



CLUSTERS OF GRAPES.

requires a great deal of care. It has to be supported on sticks, and to have the earth loosened every now and then about the roots. It is very subject to blight; and if the weather is too wet, is apt to be spoiled,

and even killed. At all times it is very slow in bringing forth its fruit, and the little grapes do not appear until the tree is six years old.

It grows in some sunny islands near to Greece, in a sea called the Ionian Sea. If ever you read the history of Greece, you will find a great deal about the Ionian Islands.

There are seven of them, and one of them is called Zante. It has high cliffs, and a pier where the people land from the ships and the boats. All kinds of persons are seen to land from the boats, and it is a pretty sight to watch their different costumes and faces. There is the Greek, and the Venetian, and a great many other foreigners; and among them is sure to be the Englishman.

The island is only sixty miles round, and there is a great plain stretching over nearly all of it, and some hills in the distance. There are pretty villages, and houses and gardens, and groves of oranges and lemons; and to stand on the hills and look over the plain, you would think it was one great vineyard.

About the end of August, the grapes on the little bushy vines are ready to gather. The people in the island never eat plumpudding or plum-cake, and they do not want the currants—for so, I think, I must call them, in spite of the word being wrong—they do not want the currants for themselves.

But England is the land for plum-puddings and mince-pies. And "John Bull," as he is styled, can do with any quantity. So a great many men, women, and children are sent into the vineyards to gather the currants, and to get them ready for him.

They pick off the little grapes, and lay

them upon the stone floor of a room or shed, that has no roof, and is open to the sky. The sun pours down his beams upon them, and very soon dries them. If the weather keeps fine, all is well. But now and then there comes a great thunderstorm, and the rain pours in torrents. Then the currants begin to ferment, and are quite spoiled. Indeed, they will not do for John Bull, who likes everything of the best quality. So the owner does not try to sell them to him. He throws them to the horses, and cows, and sheep, who eat them up very soon.

If the weather is fine, the currants get quite dry, and then they are taken away to a kind of warehouse, and poured through a hole in the roof until the warehouse is quite full. This makes them cake together, as you see when you open a packet of them.

In the warehouse they cake so much,

that men have to dig them out with sharp instruments, when the time is come for putting them into barrels. Then a man used to get into the barrel, without shoes or stockings, and trample them down as they were poured in. And there were barrels enough to fill five or six ships.

I should tell you that when the currants are brought to the warehouse, the keeper of the place has a paper given to him, saying how many of them there are. And in olden days a great fuss was made about the currants. The island belonged to the city of Venice, which was then in its glory. And five grave senators dressed in their robes used to meet to decide what the price of the currants was to be. And no one might buy them without asking leave of the Government.

When the English came into power, they did rather a foolish thing. They laid a

heavy tax on the currants, so that to eat them in puddings was like eating money. But very few people would buy them, and the little vines were neglected and left to die. The owners of them lost all their money, and had to borrow of the Jews. Indeed, there was so much grumbling, and so many complaints made, that the tax had to be altered, and then the price of currants came down.

So many ship-loads of currants come to England, that the people of Zante used to wonder what we did with them all. They were quite certain that we used them in dyeing cloth.

When Charley heard that currants were really grapes, he jumped up to pick one off the dish and put it into water. There it lay and swelled itself out, till he could see quite plainly that it was a small, round grape.

While Charley was looking at it on the palm of his hand, Richard went to fetch the map, that Aunt Martha might show them where the island of Zante was. But she would only open the atlas at the right map, and it took them a very long time to find Zante.

Then they had a little talk about the high cliffs, and the pier, and the motley group of strangers who landed there. Richard knew what a pier was, for he had seen the one at Margate. He remembered very well how the boats came, and set people down at the bottom of a flight of steps; and then he saw a great number of persons mount the stairs, and come on to the pier.

Aunt Martha said there was one thing she thought the little boys would not like, if they went to Zante. It was a very lovely island, but every now and then

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they might feel the ground under their feet begin to tremble, and perhaps the house they lived in might be shaken down. Since she could remember, there had been such a severe shock of earthquake that the town of Zante was almost destroyed.

An earthquake must be a terrible thing, Richard thought. But now he had found Corinth on the map: was there anything interesting to be said about that? Yes. And Aunt Martha asked them if they could tell her who lived at Corinth for more than a year, and taught the people that Jesus, who had been crucified, was the Messiah.

The boys looked very grave, and were obliged to confess they did not know. So then their aunt told them it was St. Paul; and that while he was there he wrote his Letter, or Epistle, as we call it, to the Romans. As soon as they were old enough,

they would read for themselves what he had said in that letter.



Charley said the word Corinth was not much like the word currant. And he did not like the idea of the currants being trodden down in the barrels by men with naked feet. Richard said currants were dirty things, and he liked raisins better. Were they grapes too? Aunt Martha told them they were a larger kind of grape, which came from Spain.

As the atlas was on the table, they might as well show her where Spain was.

She had a few raisins in her corner cupboard, and if Charley liked to put one in water, he would see what a large grape it was.

Aunt Martha was about to rise and reach out the raisins, when she dropped her needle. For after tea she had taken it up to mend a hole in Richard's glove. Charley soon found the needle, but when he had picked it up he began to look at it. Where did needles come from? Who made them? And how did they manage to make that hole for the eye?

Aunt Martha had found the raisins, and would only talk about them now. One

thing, she said, was enough at once. Tomorrow night she would answer his questions; and if they liked, her story should be
—"The Story of the Needle."





CHAPTER IX.

THE STORY OF THE NEEDLE.

HEN the winter evening is come,

and snow lies on the ground, and the wind is shrill and piercing outside, within all is snug and warm. The fire blazes brightly, and the curtains are drawn, and the lamp lighted, and the mother threads her needle; and the children gather round, to listen to some pretty story, in some instructive book that the father has brought home with him.

How quickly the hours pass!

By means of the needle, people can do all kinds of things. In skilful hands it can

make, and mend, and patch, and darn, and keep the children tidy.

And it can do more than this. It can make the sweeping trains and rich costumes that appear in the Queen's drawing-room; and the beautiful laces, and those which cost the most money, are all made by the needle.

In olden days, when those grim castles were standing that are now in ruins, the needle filled up a blank in every household.

The young ladies could not go about to croquet parties, or have much company at home. For, in the first place, croquet had not been invented; and there was always fighting going on outside the walls of the castle. And there were no nice books to read, as there are now, or pretty pictures to look at.

So the young ladies sat in the great hall of the castle, with their damsels about them,

and employed themselves with the *needle*. And many a gay banner and scarf was wrought, that fluttered on the field of battle, or streamed from the castle walls.

And further back still, the queens and princesses of high degree sat in their chambers and wrought with the needle. And they made garments of divers colours, like that which Jacob gave to his son Joseph, or those which the mother of Sisera expected when she looked out of the window,—" Needlework of divers colours on both sides, meet for the necks of them that take the spoil."

But what is the needle? And where did it come from, and who made it?

Once a great coil of wire was brought into a room in a mill, and hung on a wooden bar until it was wanted. The wire was very fine, and was made of steel; and it was kept near a fire lest it should get rusty.

One day a man came and carried it away to a place called a "cutting shop," and a great pair of shears was reached down from their peg by the wall. The shears were very strong and very sharp, and they cut the wire into several thousand pieces. Of course the pieces were not quite straight, for they were bent by the act of cutting, and had to be put inside some iron rings and made red-hot. The man then took a piece of iron, and put it also inside the rings; and he rubbed the pieces of wire backwards and forwards, and kept them rolling round and round, until they were quite straight.

The pieces of wire were now, to be sure, straight as a dart; but they were not in the least like needles, and they were blunt at both ends. Each bit of wire was, in

fact, two needles, and would have to be cut through the middle.

But before this was done, the business of pointing had to be gone through. A man sat at a grindstone, with the pieces of wire in his hand, and ground the points against the stone till he had made them sharp. Every now and then he stopped, to dip the points into a kind of liquid that stood by in a trough. And as the grindstone went round and round, sparks kept flashing from the steel in a regular stream.

So well and so quickly did he work, that two thousand needles were pointed in an hour.

The grinder always looks very ill; and he wears a handkerchief tied over his mouth. If he were wise, he would not be contented with the handkerchief, but would try what is called a mouth-guard,—which was invented by a kind-hearted man named Mr. Abraham.

The mouth-guard fits over the mouth, and keeps the bits of steel that fly off the



NEEDLE-POINTER AT WORK.

needle-point from getting in. The man swallows a great deal of steel-dust in the course of the day, and that makes him look so ill. He soon gets the "grinder's asthma," as it is called; and though he can earn a great deal of money, it is as much as his life is worth. A grinder rarely lives to be forty.

When the wires were pointed at each end, they were still of no use. There was not a single eye amongst them.

They were now taken to the "stamping-shop," where was a great machine called a "stamping-machine." The man dropped one wire at a time under the stamp, and down it came with a bang, and pierced a hole partly through.

Then a boy took the needle and finished the process. He had a little press before him, and he held the wires in his hand, spread out like a fan. He laid them flat on an iron slab, and two steel points, fastened to the top of the press, were made to come down and pierce two holes close together in the middle of the wire.

The wires had now each of them two eyes and two points. They were, in fact, two needles, only they wanted dividing.

A great many boys were at work in the shop. Some wore paper caps like the workmen, and gave themselves airs as if they had been grown-up. Others were quite little, and wore pinafores; but all were as busy as bees.

When one lad had pierced the holes in the wires, another took them in hand, and ran a bit of wire right through all the eyes, so that the needles looked like a small-toothed comb. Then a man, who was expert at his trade, broke the wires in the right place. Each one was now a needle. But no one could work with it at present. It was rather bent, and very rough, and could neither mend nor make with any comfort to its owner.

A woman put the needles on a plate, and rolled a steel bar backwards and forwards over them till they were as straight as a dart. They were then laid on an iron tray, and put into a furnace; and, after a time, taken out, and plunged into cold water; laid on the tray again, and moved about, till they were said to be hardened and "tempered," and made quite perfect,—except that they had still to be scoured.

The needles were next coated with emery, and tied up in a strip of thick canvas, and then put under the rollers of the scouring-machine. There they rubbed one against the other, until they were smooth and bright. Then they were taken out and washed in soap suds, and put back under the rollers again.

For some hours longer they kept rubbing and rubbing, and the polish became brighter and brighter, until it was thought bright enough; and at last the machine stopped, and the needles were taken out.

You might suppose that they were now quite ready for use. But no. They had to be sorted, and laid head to head, and point to point. All the bad needles were picked out and thrown away; and the good ones were touched up with polishing paste, and then wrapped up in papers, and sent to the shopkeepers to be sold.

At one time, people did not know how to make needles. They used pieces of bone, or of thorn, sharpened at one end, and with a hole in the other. If a real steel needle was ever seen, you might be sure that it came from abroad. And steel needles were so scarce, that not more than one was found in a whole parish, and it was looked upon as a great treasure!

In the reign of Queen Mary the steel

needles began first to be made in England. A negro, who had lived in Spain, understood the art, and used to make the needles. But he would never tell his secret to any one, so that no one was any the wiser.

But in the happier reign of "good Queen Bess," as she is called, the secret was taught by a German, and then the English began to make very good needles. There is a

place called Redditch, in the county of Worcester, where a great needle-making business is carried on.

In many parts of the world, such as the South Sea Islands, and the places where the American Indians live, there

are no needle manufactories to be found.

GREENLANDER'S

The Greenlanders make their needles of bones, either from the seal or the whale; and they can sew as quickly and as well as we can. The thread they use is nothing but sinews, split fine enough to go through the finest holes.

Aunt Martha promised to show them a picture by-and-by, but just then came in the tea, and her story was obliged to come to an end.

The two boys said they liked that story very much indeed. They wanted to know why boys never learned to sew.

Aunt Martha said some boys did. They seemed to forget their sailor-uncle, Jack. He could sew; he had a better work-box than she had, and needles in plenty. And he used them; she knew that, for she had seen him at work.

Richard thought it must be very sad to sit grind, grind all day with one's mouth tied up. He should like to be a doctor, and then, perhaps, he could cure some of

those poor men. Aunt Martha said that would be a good thing to do; but if he meant to be a doctor, he must learn his lessons and study very hard, because an ignorant doctor was worse than none.

Charley wanted to know what the next story would be about. Aunt Martha said she had thought of that; and since the needle was of no use unless it was threaded, her story to-morrow had better be—"The Story of the Cotton."





CHAPTER X.

THE STORY OF THE COTTON.

Martha's story. They had found so many interesting pictures to look at, and had spent so much time in the old library, that Aunt Martha was in her chair by the fire and waiting to begin before they made their appearance. And when they did come in, they had so much to say of the pictures they had seen, that Aunt Martha told them, with a smile, she foresaw they would turn the tables upon her, and begin to tell her stories, instead of her telling them.

Charley said he should like to tell his

aunt a story very much, but first he must see something to tell her. He must go and see all the curious things in the world, and then—

Charley stopped there, for his aunt looked slyly at him, and said that even then he might not be able to tell her. It was not so easy as little boys thought. Suppose he were to try; suppose he were to tell her what he had seen that day in his walk.

Charley laughed at the idea, and began. But he could not get on, and made so many mistakes, that Aunt Martha said if her stories were no better than his, they would be of very little use. But now they must listen while she told them—

THE STORY OF THE COTTON.

The needle would not be of any use without the thread.

In some parts of the world, where the

needle is made of bone or of wood, the thread is taken from the stem of a plant. For in those hot countries many of the



COTTON FLOWER AND DOWN.

plants have very tough, stringy fibres in the stem, and in the veins of the leaves; and when they are pulled out, they can be used instead of thread. But there is a plant that has a bright yellow flower; and when the flowers are over, the seeds lie on a soft bed of down. The seed-vessel, or that part which holds the seeds, is about the size of a walnut; and as soon as it is ripe it bursts, and the beautiful white down comes out with the seeds amongst it.

The soft white down would be in rather a dangerous position if there was no one at hand, for the wind is apt to carry it away. But people are always at hand, and this is the most important time of the year.

The white down is the cotton, which byand-by will be made into gowns, and handkerchiefs, and all manner of articles of clothing; and some of it will be wound round a bobbin, like this out of my corner cupboard, and go through the eye of the needle.

In hot countries, the people wear cotton

GATHERING THE COTTON DOWN.

garments for the sake of coolness; and all over the world cotton is wanted every day; and the shop windows at home are full of it in one form or other. But every bit of it came from the plant with the bright yellow flowers.

But the cotton cannot be made into gowns or anything else until the troublesome little seeds are all got out. And this used to take a great deal of time. People used to sit all day and pick them out by the hand. But a machine is now used that very soon settles the matter.

In America, where the cotton-plant has been growing, there are great mills in which quantities of cotton are cleansed in a day; and the work is all done by horses or by steam.

But lest a few seeds might be left in the down, it has to be whisked about in a kind of wheel, through which a great wind

rushes; and when every atom of seed has been blown away, the cotton is gathered up, and taken to a house called a packinghouse; and forced into bags that are made to hold as much as they can.

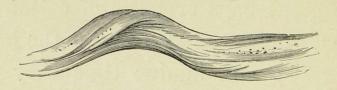
Then they are strongly sewed up and sent on board a ship. But before they are put into the ship, the bags are squeezed and pressed until they are only half their original size.

The great bags or bales of cotton cross the sea, safely stowed away in the hold of the vessel; and in due time they reach England, and are taken out at a city called Liverpool.

There is a great noise and bustle while the ship is unlading; and a great deal to be done with counting the bales and seeing that all is right.

But the heavy bales do not stay in Liverpool. They are put on the railway, and go whirling off to another great city, called Manchester, where there are tall factories more than you can number, and where the people who spin the cotton get so rich that they can live in the grandest houses, and buy the most beautiful pictures in England.

When the bales of cotton come to be opened, the cotton looks like a heap of fibre matted and tangled together.



FIBRES OF COTTON DOWN SEEN THROUGH THE MICROSCOPE.

It has first to be made into a thread, or, as it is called, a yarn; for if you look at a piece of cotton cloth very closely, or through a magnifying glass, you will see that it is made up of threads that go through its whole length and breadth.

And I had better tell you here, that the

long threads are called the warp, and the short threads across, the woof.

The first thing to be done, is to get the cotton untangled; and a machine is used that has a great many spikes or teeth, on purpose to catch the cotton and pull its fibres apart.

A boy takes an armful of cotton and puts it into a kind of box, and shuts it up; and when the machine has worked it about a little time, he opens the door and takes it out again.

The cotton is now disentangled, and every bit of dust has been got away. But it is still a mass of confusion, as far as the fibres go, and they want to be pulled straight and made into threads.

This is done by what is called *carding*; and the carding-machine acts very much as a comb or a brush does when it straightens a rough head of hair.

The carding-machine used in these days has a great many fine teeth, and is very delicate indeed. But, delicate as it is, the threads, even though they have passed through it, are not quite ready for the spinner. Many of them have got doubled up, and they have to go through another machine to be made straight.

When you are old enough, you will read a great deal about Sir Richard Arkwright, and all the machines he invented, and the improvements he made in cotton-spinning and weaving. Indeed, he may be said to have called into life that wonderful trade in cotton which has made England so rich and so flourishing.

When all the work was done by the hand, not much cotton could be picked or woven, and then not much cotton was sold. But when machines were invented, and steam was made to work, mighty factories

began to be built; and what were once villages soon became great cities; and bales on bales of cotton were brought into England by millions!

One machine can do the work of five thousand men, and produce a thread five hundred miles long in a minute; and in half an hour a thread might be spun that would reach from England to India!

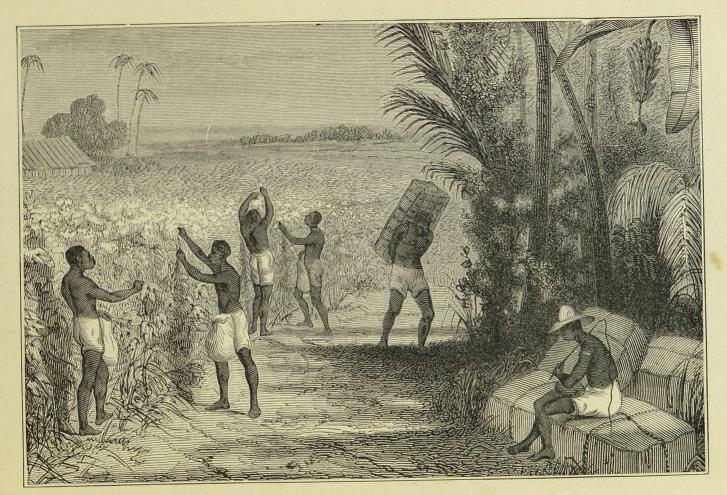
When Aunt Martha had finished, Charley said he should like to see a picture of the machine that Sir Richard Arkwright had invented, if his aunt had one to show him. He should like to be a man, and to invent things as he did.

Aunt Martha said she wished he might be able; but that great and good men began to work while they were young. Idle boys grew up as idle men; and dunces very seldom did anything useful.

Charley blushed, and said that he and Richard did not mean to be dunces. Aunt Martha would see if they did not bring home a prize next half-year. They should try for it; but they wished to stay with her instead of going back to Dr. Birch, she taught them things so easily.

She said that would not do. What they wanted was to read for themselves; and if they meant to go to other countries to see all the curious things there were to be seen, they must learn the languages of those countries, or it would be of very little use.

Richard said they had found a picture in the library of black men gathering the cotton. Might he fetch it for his aunt to look at? She gave him leave; and a very pretty picture it was. The beautiful cotton, white and downy, was growing as tall as the men who were plucking it off; and great bales



BLACK MEN GATHERING THE COTTON.

were lying, ready packed and corded, under the shade of some trees. It looked as if it was a very hot country indeed, for the men who were at work had not many clothes on; and the trees were not at all like our trees.

Aunt Martha told them that the one with the crown of leaves at the top was a palm-tree, which was of so much use to the natives that it was called the "Beneficent Palm."

Food, and wine, and house, and clothing, were all provided by the palm. Indeed, the poets of the East have said that its uses are as many as there are days in the year!





CHAPTER XI.

THE STORY OF THE RICE.

HE yellow corn that waves in the field is one of the most useful plants that grows. It feeds hundreds and thousands of persons, and has been called the "staff of life." But rice feeds millions—nay, hundreds of millions!

Just open the map of Asia and look at it. Do you see the great peninsula of Hindustan? and do you see China, and Japan, and the islands round about? And turn to another map, where the New World is spread out before you. There is a state called Carolina, where the rice grows and flourishes. Nay, in Europe itself, on the

banks of the river Danube, it is not lacking. So far does its domain extend.

And all the swarming hosts of China and of India feed on rice, and it is to them what bread is to us—the staff of life.

People in those hot countries do not care for beef or mutton. A little boiled rice, seasoned with pepper, makes them a good dinner. In England such is not the case. Rice is eaten, it is true, but rather smiled at for its simplicity. An Englishman would look very blank, if he had nothing set before him but a dish of rice.

The plant that bears the rice wants a great deal of moisture; and, on this account, you might suppose the English climate would just suit it. And so it might, if the sun were but hot enough. But it is a tropical plant, and the least frost would kill it.

When it does rain in the tropics, it pours intorrents, and comes from the clouds like a sheet of water. The water cannot run away all at once, and in some places forms a great lake. This is just § the place for the rice to grow; for it must be kept, till nearly ripe, with its head only just above water.

It is not very pleasant to work in the mud. But



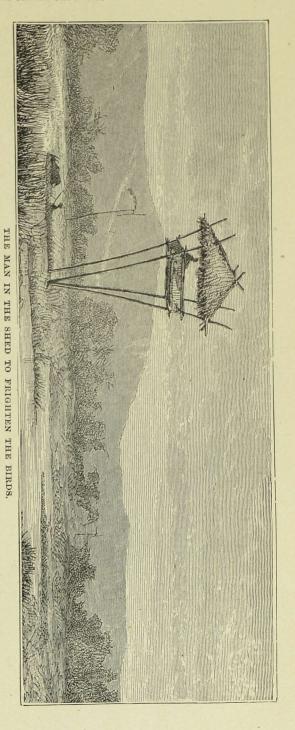
the farmer, and the buffalo that draws the plough, have to do it. They wade about as best they can; and here and there a bird with long legs, called a heron, stands patiently waiting for a fish in the middle of a rice-field, as if he thought fishes must be there.

And here and there is a little shed built on poles, with a man sitting inside it. A great many ropes are fastened to it, and spread over the field. A number of scarecrows are tied to the ropes, and the man in the shed makes them jump up and down.

This is done to frighten away a flock of birds called "rice-birds," that love to pick out the grain while it is soft and milky. When the odd-looking figures, or scarecrows, begin to jump about, the birds that have been picking and eating, and doing all the mischief they can, rise in the air and fly away. But as soon as the scare-

crows are at rest again, they come back, and go on feasting on the rice.

In a month or two the flood is gone, and the field looks as if it were covered with a waving crop of barley. Then comes the busy time of harvest; and the villagers all turn out to reap, sometimes up to their knees in mud. This muddy part of the business is

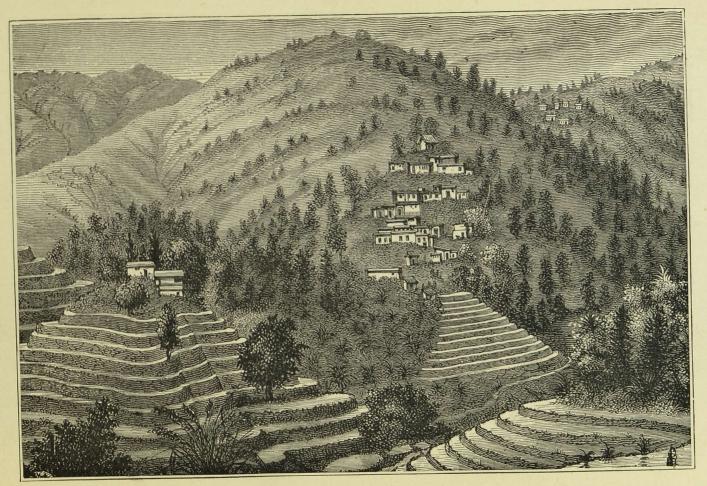


not very healthy, and the people who work in the rice-field often die of fever.

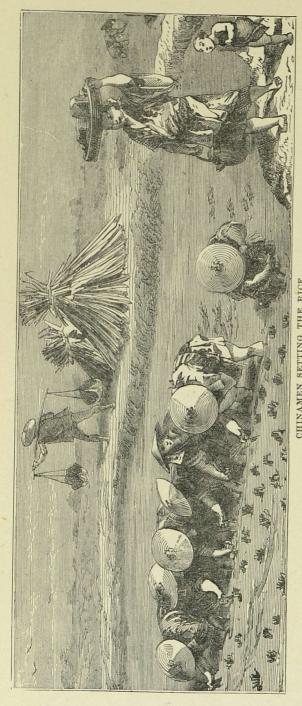
When there is no flood likely to come upon the ground, the water is made to stand upon it from some river. This process is called by the long name of "artificial irrigation."

We never need it in England, where the clouds keep us amply supplied; and we never meet with such a machine as a water-wheel, set up for the purpose of pumping water on the land. Nor are we obliged to coax our rivers and streams up-hill, and then let them run down into the valleys. But all this is done in countries where it does not rain for months at a time.

The Chinese farmer is very fond of making terraces on the banks of a river, for his rice to grow upon. He ploughs the land with the help of the buffalo, for horses are



THE CHINAMAN'S TERRACES.



not used as in England. Both man and buffalo wade in the mud, and seem quite contented.

Then, when the land has been ploughed, the ploughed, the rice - plants are brought from a brought from a hot-bed, and set in holes made on purpose. The holes are full of water, that has been pumped up from the river by the water-wheel. It is

pumped up to the top terrace, and then is let to run down all over the rest.

This pumping goes on until the ricestalks begin to turn yellow. Then the Chinaman gives over, for he knows the plants have had enough.

When the crops are ripe, the terraces have a green and beautiful appearance, and look like gardens.

Sometimes the little trickling rill is led many miles along the country to a ricefield that wants water; and no trouble is thought too great to ensure a plentiful crop.

There is a kind of rice that does not require all this watering. It is called mountain-rice, and grows in the island of Sumatra, where it rains every few days. When the crop has been gathered in, the land is let to lie fallow for a time, and then it becomes covered with a great jungle-

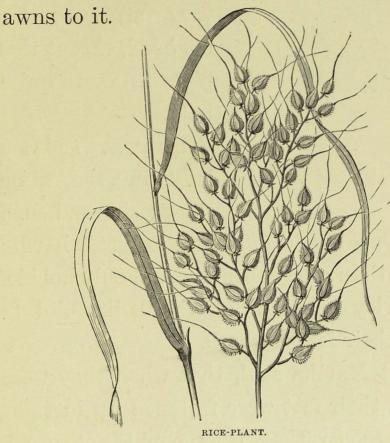
grass as much as twelve feet high. In this tall grass the tiger hides himself, or the rhinoceros comes to graze.

But when the ground is wanted for another crop, the tall grass has to be burned off. As soon as the fire is lighted, a loud, rustling noise is heard, and the great column of flame rises and sweeps along, till the whole ground is covered with a sheet of fire.

If the traveller sees the column in the distance, he takes care to escape it if he can. But sometimes it is too quick in its march for him to get away, and then woe betide him!

When Aunt Martha had finished her story, she got up, and opening her corner cupboard, reached down a jar of rice for the boys to look at. After that, she showed them a picture of the plant itself, as it

looks when growing. It had three ears on the top of each stalk, and each ear had



Charley said it was almost, only not quite, like barley.

Richard said he should like to see a Chinaman ploughing, with his buffaloes, in the mud. He had once seen a Chinese

giant: he wore his hair in a long pigtail down his back. Charley said it looked



CHINAMAN'S PIGTAIL.

very strange; for his head, except this pigtail, was quite hald

There was a Chinese lady in the same show; she had such small feet, hardly

bigger than a baby's, and could only hobble. Charley asked what the ladies did to make their feet so small.

Aunt Martha said, that when they were babies, their feet were fastened up in tight bandages, so that they could not grow. When Charley got home, he must ask his papa to take him to the museum, and show him all the curious things that were there.

Aunt Martha had seen the museum long

ago, and knew that a great many things in it had been brought from China.

The boys then began to talk about the rice-puddings they had so many of at school. Charley said he should like them better, now he knew so many people lived on rice, without any meat at all.

Aunt Martha observed that everything in her corner cupboard had told them its story. The tea-cup, and the tea, and the sugar, and the coffee, and the rice, and the salt, and the currants, and even the needle and cotton. It was well they were going home so soon, for there would be no more tales to tell. Yes, she believed everything had told them its story.

Charley said, might he see? And, before his aunt had time to reply, he had jumped on a chair, and was peering into her cupboard. What was that yellow jar hidden up so snug? What had that inside it?

Aunt Martha said that indeed she had forgotten that; it was her honey-jar. If they liked, she would tell them a tale about Honey to finish with; it would be short and sweet.





CHAPTER XII.

THE STORY OF THE HONEY.

board have been made, or, as it is called, manufactured, by man. And if he has not made them, he has at least prepared and got them ready for use. Even the tea and the coffee and the sugar have to pass through his hands before they come to table.

But I am going now to tell you about something with which he has very little to do. He has neither made nor prepared it, and yet it is something we all like very much, and should be sorry to do without.

The garden in summer-time is full of



bright-coloured flowers. The rose, and the honeysuckle, and the jessamine that climbs over the porch; and the white lily, and the pink, and the carnation. Now in the deep recess of the flower a sweet juice lies hidden. It is not honey, but it is the stuff out of which honey is made.

A hundred little workmen

are busy carrying away the juice—or, as it is called, the nectar—for the very purpose of making honey. You will guess that I mean the bees. But the bees are very knowing, and they do not take the nectar out of all the flowers; they skip over some, as if they did not like them.

The bee is very intent on its work. It lives in the hive by the garden wall: though it has plenty of relatives who do not live in a hive, but make their nests out in the fields and woods; but they all carry on the same trade,—that of honey-making.

No one can take any liberties with the bee, because it is armed with a sharp little sword called a sting; but it is worth while to stand a minute and see what it is about.

It has a tongue which is a great deal too long for its mouth, so it lies folded down on its breast. When the bee settles on a flower,

bottom of it. The tongue is like a sponge, and sucks up all the nectar. The nectar passes along the body of the bee to a curious little bag called the honey-bag, and that seems made on purpose to hold it.

By-and-by the bee flies off home to the hive with its honey-bag quite full. The hive, as you know, has a great many cells in it made of wax, and they form what is called the honey-comb.

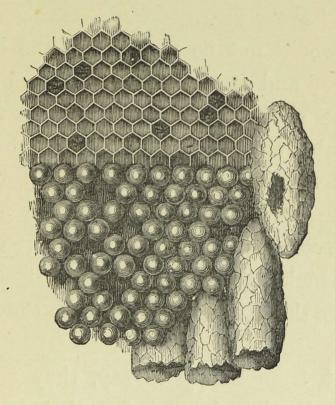
THE BEE'S TONGUE.

The bee pushes its head THE BEE'S HONEY-BAO

into a cell, and empties the honey by drops out of its honey-bag; and then comes another bee, and does the same, till the cell is quite full; and then it is closed up with a waxen lid to keep out the air.

I do not pretend to find out a secret

known only to the bee, but it is quite certain that the nectar by some means or other has become changed into honey. It is full of little bright crystals like sugar, and has



PART OF A HONEY-COMB.

a pleasant smell, and a taste I need hardly describe.

All over the country, in every garden are the little honey-makers at work from morning till night. They are doing it to lay up a store of food for themselves. But honey is very nice, and the wax that they make their comb of is very useful; so the bee is robbed every year.

It would not be easy to rob the hive in an open and straightforward way, because of the sharp little swords I have told you about. But the owner of the hive gets some round white balls that are found in the fields, and are called furze balls, and sets them on fire under the hive. The smoke gets in among the bees, and makes them drop down as if they were dead.

But, I am happy to say, they come to life again, though not before their beautiful comb with all its nice honey has been run away with.

When the honey has been poured out of the cells it is clear and liquid; but in this



country, where the weather is never very hot, it soon hardens and thickens as you see when it is brought to table.

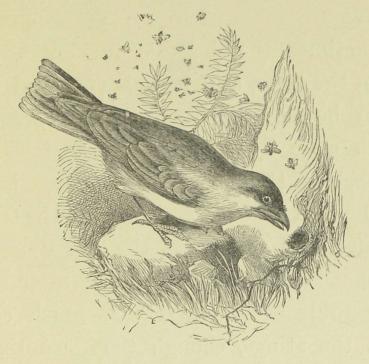
A great many years ago, people used to drink a nice sweet wine called mead, and that was made of honey.

We never hear about mead in these days, when so many different sorts of wines are brought to us from other countries. But in olden times mead was held in very high esteem; and the person who made it, and who was called "the mead-maker," was thought to be of more importance than the doctor. Queen Elizabeth used to drink a great deal of mead, and left behind a recipe for the best way of making it.

In these days, though mead is out of fashion, honey and wax are considered part of the riches of the kingdom, and are bought and sold everywhere.

There is a bird called the honey-guide,

that lives in Africa, in the country of the Hottentots. It is rather larger than a sparrow, and is so fond of honey that it is always on the look-out to get some. There



THE HONEY-GUIDE.

are no bee-hives in that country, but the bees make their nests in the hollow of a tree, or in some other sheltered place.

The bird is sure to find its way to the bee's-nest, but it does not like to attack

it, for fear of being stung. So it begins to call out in its own way for some one else to come; it makes a loud piercing cry, that is well known by all who are within hearing.

Sometimes the bear is lurking about among the trees, and he hears it; and byand-by he sees the bird perched on some branch close by. The bird flies towards the nest of the poor unsuspecting bees, and the bear follows; for he loves the taste of honey, and this is not the first time, by any means, that he has gone after the honey-guide. He does not much care about the stings, though they sometimes put him into a great passion. At any rate, he pulls out the nest with his feet and paws, and feasts on the honey; and while the bear is eating, the bird is sure to get as much as it wants.

The Hottentot knows the voice of the

honey-guide, and follows it with great delight. When he reaches the nest, he does not forget his kind friend; he takes care to leave behind that part of the comb which contains the eggs and the little grubs, for the bird likes these better even than the honey.

And he would not catch or kill the honey-guide for any reward that could be offered. A traveller once told a Hottentot that he would give him any number of glass beads and a great deal of tobacco, if he would set a trap for the honey-guide. But the Hottentot would do nothing of the kind.

"The bird is our friend," he said, "and we will not betray it!"

Richard and Charley were very sorry when Aunt Martha came to the end of her story; and they might have said more about their regret that it was to be the last, had not Charley espied old Sally reaching the jar of honey out of the cupboard.

What was she going to do with it? Charley was not wrong in guessing; although, on sitting down to tea, he made believe to look surprised at a nice slice of bread and honey on the plate before him. How good it was!

He asked Aunt Martha why she did not keep bees, she had so many flowers in the garden.

Aunt Martha said she had thought about it, and that perhaps next time they came to see her, they might find she had set up a bee-house.

Charley hoped, if Aunt Martha did keep bees, she would not have them killed when the honey was taken; it was a shame to kill them when they had worked so hard.

Richard said it was more cruel to take their honey, and leave them to starve. Aunt Martha said so it was; but that if she kept bees, she meant to take care of them,—for to keep bees, or birds, or any living thing, and not to be kind to them, was very wicked indeed.

Richard said the boys at school kept rabbits, and sometimes forgot to feed them; but Charley had never forgotten to feed his. And he liked that Hottentot, and thought him a fine fellow, for not betraying the honey-guide. He should have done just the same himself.

When tea was over, Aunt Martha said, as she had no knitting to do that night, she should not mind playing a game at chess; they two might be on one side, and she would be on the other. So when old Sally had taken away the tea-things, and made up the fire, Richard fetched out the chess-board, and he and Charley set the men.

When the game began, Aunt Martha said she was afraid she should be beaten,—it would be hard to play against them both. The boys did not think so; and they were right,—for they first lost their knights, then their bishops, and then, to Charley's great dismay, their queen. Old Sally tapped at the door to take them off to bed, just as Aunt Martha had got their king into a corner, and contrived to say check-mate!

The next day, the boys returned to school. Aunt Martha was very sorry to part with them; but old Sally predicted they were going back to learn, and she was not a bit afraid of their turning out dunces.

Old Sally was right; for the two boys had no sooner got back to school than they set to work in earnest; indeed, the very first thing they did was to pull out of the

desk their dog's-eared geography. They wanted to see if it said anything about the places their aunt had told them of in her stories. When they found that it did, they hastened from one to another of the great maps which hung on the school-room wall, talking all the time about Brazil and China, Zante and Corinth. One would have thought they had just come back from a voyage round the world!

They were so anxious to learn, that Dr. Birch could hardly believe they were the same boys who had only cared for tops and marbles. Nor did his wonder cease when, week after week, their lessons were well said, their copies neatly written, their sums done without mistakes; when, in fact, from lazy, idle boys, they became good, industrious scholars!

Ah! how they enjoyed their play-time! Yet play-time was not half so joyful as going home for the holidays, for they had each a prize to take with them!

Perhaps you would like to know what their prizes were.

Richard's was a handsome writing-desk, with ink, and pens, and paper; it was lined with crimson velvet, and had a little box for stamps.

Charley's was a paint-box full of gay colours. It had a little pallet to rub the colours on, and plenty of brushes. He painted a great many pictures; but the one his mamma liked best, was of a robin redbreast picking up some crumbs.

Then, too, there came a kind letter from Dr. Birch to their papa, saying how hard they had worked, and that he was quite contented with them.

Before the first week of the holidays was over, they took the letter and their prizes for Aunt Martha to see; and she was very pleased indeed, and praised them quite as much as Dr. Birch had done. And they told old Sally that their love of learning had all come out of the corner cupboard, and they hoped Aunt Martha would never, never have it taken down.

And so the two boys, who had before been so idle and ignorant, grew up industrious and learned men. They were, besides, able to be kind and good to others; for that is the real use of learning,—as we hope our little readers will one day find out for themselves, even if they have not an Aunt Martha, and a Corner Cupboard.







